



# House of Representatives

## File No. 1003

General Assembly

January Session, 2009

**(Reprint of File No. 21)**

Substitute House Bill No. 6284  
As Amended by House Amendment  
Schedule "A"

Approved by the Legislative Commissioner  
May 28, 2009

### **AN ACT CONCERNING GREEN BUILDING STANDARDS AND ENERGY EFFICIENCY REQUIREMENTS FOR COMMERCIAL AND RESIDENTIAL BUILDINGS.**

Be it enacted by the Senate and House of Representatives in General  
Assembly convened:

1 Section 1. Section 29-256a of the general statutes is repealed and the  
2 following is substituted in lieu thereof (*Effective from passage*):

3 (a) [On and after January 1, 2008, the] The State Building Inspector  
4 and the Codes and Standards Committee shall revise the State  
5 Building Code to require that commercial and residential buildings  
6 and building elements [, including residential,] be designed to provide  
7 optimum cost-effective energy efficiency over the useful life of the  
8 building [. Such revision shall meet the American Society of Heating,  
9 Refrigerating and Air Conditioning Engineers Standard 90.1 for new  
10 construction] and to incorporate the 2012 International Energy  
11 Conservation Code, not later than eighteen months after the  
12 publication of said code. The provisions of this section shall not be  
13 construed to impose any new requirement for any renovation or  
14 construction of a state building that is subject to the requirements of

15 section 16a-38k, regardless of whether such building has been granted  
16 an exemption under said section.

17 (b) Notwithstanding subsection (a) of this section, on and after July  
18 1, 2010, the State Building Inspector and the Codes and Standards  
19 Committee, in consultation with the Commissioner of Public Safety,  
20 shall revise the State Building Code to [require that any (1) building,  
21 except a residential building with no more than four units, constructed  
22 after January 1, 2009, that is projected to cost not less than five million  
23 dollars, and (2) renovation to any building, except a residential  
24 building with no more than four units, started after January 1, 2010,  
25 that is projected to cost not less than two million dollars shall be built  
26 or renovated using] include provisions requiring certain buildings of  
27 or over a specified minimum size, that qualify as a new construction or  
28 a major alteration of a residential or nonresidential building, to meet or  
29 exceed optimum cost-effective building construction standards  
30 [consistent with or exceeding] concerning the thermal envelope or  
31 mechanical systems, including, but not limited to, indoor air quality  
32 and water conservation, and the lighting and electrical systems of the  
33 building. Such provisions shall reference nationally accepted green  
34 building rating systems, including, but not limited to, the [silver  
35 building rating of the] Leadership in Energy and Environmental  
36 [Design's] Design rating system, [for new commercial construction and  
37 major renovation projects, as established by the United States Green  
38 Building Council, or an equivalent standard, including, but not limited  
39 to, a two-globe rating in] the Green Globes USA design program, as  
40 established by the Green Building Initiative, the National Green  
41 Building Standard, as established by the National Association of Home  
42 Builders, or an equivalent rating system approved by the State  
43 Building Inspector and the Codes and Standards Committee. [The  
44 inspector and the committee shall provide for an exemption for any  
45 building if the Institute for Sustainable Energy finds, in a written  
46 analysis, that the cost of such compliance significantly outweighs the  
47 benefits.] Such requirements shall include a method for demonstrating  
48 compliance at the time of application for a certificate of occupancy,

49 including, but not limited to, private third-party certification or  
50 verification of compliance with the relevant portions of such rating  
51 systems, including, but not limited to, the energy and environmental  
52 portions.

53 Sec. 2. Section 29-251 of the general statutes is repealed and the  
54 following is substituted in lieu thereof (*Effective from passage*):

55 There shall be within the Department of Public Safety a Codes and  
56 Standards Committee whose duty it shall be to work with the State  
57 Building Inspector in the enforcement of part Ia and the State Fire  
58 Marshal in the enforcement of part II of this chapter as set forth herein.  
59 The committee shall be composed of [seventeen] eighteen members,  
60 residents of the state, appointed by the Commissioner of Public Safety  
61 as follows: (1) Two members shall be architects licensed in the state of  
62 Connecticut; (2) three shall be professional engineers licensed in the  
63 state of Connecticut, two of whom shall practice either structural,  
64 mechanical or electrical engineering but in no event shall both of such  
65 members represent the same specialty and one of whom shall be a  
66 practicing fire protection engineer or mechanical engineer with  
67 extensive experience in fire protection; (3) two shall be builders or  
68 superintendents of construction, one of whom shall have expertise in  
69 residential construction and one of whom shall have expertise in  
70 nonresidential construction; (4) one shall be a public health official; (5)  
71 two shall be building officials; (6) two shall be local fire marshals; (7)  
72 one shall be a Connecticut member of a national building trades labor  
73 organization; (8) one shall have expertise in matters relating to energy  
74 efficiency; and (9) four shall be public members, one of whom shall  
75 have expertise in matters relating to accessibility and use of facilities  
76 by the physically disabled and who shall be selected from a list of  
77 names submitted by the Office of Protection and Advocacy for Persons  
78 with Disabilities. Each member, other than the public members, shall  
79 have had not less than ten years' practical experience in [his] such  
80 member's profession or business. The committee shall adopt  
81 regulations in accordance with the provisions of chapter 54 governing  
82 the procedure of the committee. Members who fail to attend three

83 consecutive meetings or fifty per cent of all meetings during a calendar  
84 year shall be deemed to have resigned. [It shall have power] The  
85 committee may, within the limits of appropriations provided therefor,  
86 [to] employ such assistants as may be necessary to conduct its  
87 business.

This act shall take effect as follows and shall amend the following sections:		
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Section 1	<i>from passage</i>	29-256a
Sec. 2	<i>from passage</i>	29-251

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

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### ***OFA Fiscal Note***

***State Impact:*** None

***Municipal Impact:*** None

### ***Explanation***

The bill makes various changes to “green building” standards that do not result in a fiscal impact because the new energy efficiency requirements are not imposed on state-owned or municipally-owned buildings.

The bill also requires the State Building Inspector and the Codes and Standards Committee to revise the State Building Code to address “green building” standards. It increases by one the number of members on the Codes and Standards Committee within the Department of Public Safety. Members of this Committee are appointed and receive no compensation or reimbursement for their services. This does not result in any fiscal impact to the state or municipalities.

House “A” specifies that green building standards are only applicable to commercial and residential buildings, and increased the number of members on the Codes and Standards Committee by one. This does not result in any fiscal impact.

### ***The Out Years***

***State Impact:*** None

***Municipal Impact:*** None

**OLR Bill Analysis****sHB 6284 (as amended by House "A")\******AN ACT CONCERNING ADOPTION OF A MODEL ENERGY CODE  
AND GREEN BUILDING STANDARDS.*****SUMMARY:**

This bill delays the date when "green building" standards take effect and narrows their scope. It requires the state building inspector and Codes and Standards Committee to establish the threshold size for buildings subject to the standards. Under current law, the standards apply to certain new construction costing \$5 million or more and renovations costing \$2 million or more.

The bill delays and modifies the requirement that the state building inspector and Codes and Standards Committee revise the State Building Code with regard to energy efficiency standards.

The bill also increases the membership of the Codes and Standards Committee, from 17 to 18, by adding a member with expertise in matters relating to energy efficiency.

\*House Amendment "A" (1) modifies the requirement pertaining to revisions of the state building code and energy efficiency standards, (2) specifies that the bill cannot be construed to impose new requirements on state buildings subject to "green building standards," (3) adds the Codes and Standards Committee member, (4) excludes a provision that the building code revision include a method for demonstrating compliance at the time of application for a building permit, and (5) makes a technical change.

EFFECTIVE DATE: Upon passage

## **GREEN BUILDING STANDARDS**

Current law requires the inspector and committee to amend the State Building Code to require (1) buildings costing \$5 million or more and built after January 1, 2009 and (2) renovations started after January 1, 2010, and costing \$2 million or more to meet green building standards. The standards are (1) a silver rating under the Leadership in Energy and Environmental Design (LEED) rating system for new commercial construction and major renovation projects, (2) a two-globe rating under the Green Globes USA design program, or (3) an equivalent standard. Under LEED and Green Globes, a project's rating is based on the number of points it receives. Buildings can receive points for a wide range of characteristics, including energy efficiency, use of renewable energy, water conservation, indoor air quality, reuse of existing buildings and building materials, and environmentally sensitive site design. Under both systems, current law requires the building to achieve the second lowest rating on a four-point scale. The requirements apply to private and public sector buildings, other than residential buildings with up to four units.

The bill instead requires the building inspector and committee, in consultation with the public safety commissioner, on and after July 1, 2010 to revise the code with regard to green building standards. Specifically, it requires them to amend the code to require certain buildings that qualify as new construction or major alteration of a residential or nonresidential building to meet or exceed optimum building construction standards for the thermal envelope or mechanical systems. The provisions must at least address indoor air quality, water conservation, and the building's lighting and electrical systems. They must reference nationally accepted green building rating systems, which, under the bill, include the National Green Building Standard, as established by the National Association of Home Builders; as well as LEED and Green Globes; or an equivalent rating system approved by the state building inspector and committee.

The bill requires that the revision include a method for

demonstrating compliance at the time of application for a certificate of occupancy. These can include, among other things, private third party certification or verification of compliance with the relevant portions of the rating systems, including the energy and environmental portions.

The bill eliminates a requirement that the inspector and the committee waive the current requirements if the Institute for Sustainable Energy finds that the cost of compliance significantly outweighs the benefits.

### **BUILDING CODE REVISION**

Under current law, the state building inspector and Codes and Standards Committee, on and after January 1, 2008, must revise the state building code to require that all building and building elements are designed to meet energy efficiency standards over the building's useful life. The revisions must meet the American Society of Heating, Refrigerating and Air Conditioning Standard 90.1 for new construction.

The bill, instead, limits the revisions to commercial and residential buildings, instead of all buildings. It also (1) eliminates the required ongoing revision of the code to incorporate energy efficiency standards and (2) delays adoption of the standards by requiring that the code incorporate the 2012 International Energy Conservation Code, not later than 18 months after its publication. These provisions cannot be construed to impose any new requirement for renovation or construction of state buildings subject to "green building standards" under existing law (CGS § 16a-38k), regardless of whether the building has been granted an exemption.

### **COMMITTEE ACTION**

Public Safety and Security Committee

Joint Favorable Substitute

Yea 20 Nay 0 (02/17/2009)

Environment Committee



Joint Favorable

Yea     27     Nay   0     (04/24/2009)

Energy and Technology Committee

Joint Favorable

Yea     19     Nay   0     (05/12/2009)